

01/25/06

INTERVIEW # HILAN LOCKHART 39,248
BRENDA LUCIANO

06/03/99 - DEV
09/16/98 - CIP
Art Unit: 1648
03/10/98 - 371
09/14/97 - PRO

Serial No.: 10/023,909
Conf. No.: 8458

- 2 -

In the Claims

1, 5, 8-13, 20-33, 35

Please replace all prior versions, and listings, of claims in the application with the following list of claims:

1. (Previously Presented) A method of inducing an antigen specific immune response in a subject, comprising:

i) administering to the subject in order to induce an antigen specific immune response an antigen and a combination of adjuvants, wherein the combination of adjuvants includes at least one oligonucleotide containing at least one unmethylated CpG dinucleotide and at least one non-nucleic acid adjuvant, wherein the non-nucleic acid adjuvant is a (non-saponin immune stimulating adjuvant) wherein the combination of adjuvants is administered in an effective amount for inducing a (synergistic adjuvant response) and wherein the (oligonucleotide is 8-100 nucleotides in length) and has at least (one phosphate backbone modification)

STIMULATES
IMMUNE RESPONSE
STIMULATES

→ HI I.R.

2-4. (Cancelled)

THAT IS: 98 SEQUENCES CpG ODN (pp 42-44)
Ag: LONG LAST (pp 22-23)

5. (Previously Presented) The method of claim 1, wherein the immune stimulating adjuvant is selected from the group consisting of PCPP polymer, derivatives of lipopolysaccharides, MPL, MDP, t-MDP, OM-174 and *Leishmania* elongation factor.

1) NM & CLAIM

2) WD

- MODIFIED CpG
DINUCLEOTIDES

6-7. (Cancelled)

3) REINFORCEMENT

8. (Original) The method of claim 1, wherein the combination of adjuvants is administered with a priming dose of antigen.

2000
324
12000

9. (Original) The method of claim 1, wherein the combination of adjuvants is administered with a boost dose of antigen.

CpG DINUCLEOTIDE
883514
ALUM + H3S Ag + CpG ODN → 500-1000x ↑
(7x) (32x)

ODN # 1826 (SEQ ID NO 86)
2006 (77)
1968 (72)

→ ONLY
REMARKS

OF CpG HAVE DEF. PROP.
ADJUVANT EFFECTS
ARE UNPREDICTABLE

Jane Johnson 558 Feb. 22
1008, CCPA 1977

EX. 1: MPL + H3S Ag + CpG ODN → 50
(1000x)
1826

S AOS

HB5Ag
TT

ISA 220

ISA 220

ISA

CT

LT

MF-59

MPL

Fig 7.

HB5Ag

TT

CpG ODN 1826

CpG ODN 7909

CpG ODN 1982

CpG Thl PNAS

* CpG OLIGOS ARE WELL KNOWN IN THE ART!

- CLAIM AS A WHOLE WELL KNOWN

	Ag	CpG	AOS	
FIG. 1: PRC	HB5Ag	1826	ALUM FIR	TTT TTT
FIG. 2:	HB5Ag	1826	MONT	TTT IgG2a
3:	TT	1826	MONT	TTT
4:	HB5Ag	1826	CT	TTT
18:	HB5Ag	1826	LT	TTT
17:	HB5Ag	1826 2066	MF9	TTT

* DEP. ROUTES OR ADMINIS. FUNCTION

7909-2066

US: HB5Ag 2066 MF59 TTT

FLANKING

* CpG ARE SIMILAR; ACTUAL SEQUENCES ARE NOT CRITICAL